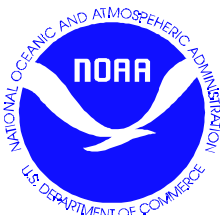


National Oceanographic Data Center
CD-ROM DATA SETS

User Services Inter-Divisional Team
National Oceanographic Data Center
Silver Spring, MD

November 1999



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Environmental Satellite, Data and Information Service
National Oceanographic Data Center

NODC Environmental Information Bulletin 93-2 (Revised)

HOW TO ORDER NODC PRODUCTS

This flier lists all CD-ROM data products available from the National Oceanographic Data Center (NODC). The last page provides a current price list for all the ocean data CD-ROM products described here. Please note the shipping/handling charges described at the bottom of the price list. These charges are added to each order as required. Please also note that NODC can only accept credit card orders directly. Orders containing checks or money orders should be mailed to the NNDC Fiscal Group address.

Prepayment is required for non-Federal customers and may be made by:

- ! Check or money order (in U.S. dollars drawn on a U.S. bank and made payable to the "NOAA National Data Centers")
- ! Credit card (Visa, Master Card, American Express or Discover)

A two-tier pricing schedule is in effect. For orders submitted by mail, e-mail, telephone or fax, customers in the United States affiliated with government agencies, universities, or other non-profit organizations are eligible to receive products at the discount price. *All* customers are eligible to receive products at the discount prices if ordered online via the NNDC online store. Therefore, online ordering provides convenience and savings for customers in the business and commercial sectors, as well as customers outside of the United States.

ORDER ONLINE

CD-ROM's and other data products and services of the NODC and the other NOAA National Data Centers can be ordered via the Internet through the NOAA National Data Centers' Online Store. This secure system allows customers to provide their credit card information to order products online. Please note that prices for products ordered online are the discount prices normally available only to customers in the United States affiliated with government agencies, universities, and other non-profit organizations.

The NOAA National Data Centers Online Store may be accessed via the NODC web site at:

<http://www.nodc.noaa.gov/>

BY PHONE

Telephone orders should be directed to:
301-713-3277

BY E-MAIL

Send your e-mail orders to:
services@nodc.noaa.gov

BY FAX

Orders may be faxed to:
301-713-3302

BY MAIL

• Credit Card orders:

National Oceanographic Data Center
NOAA/NESDIS E/OC1
SSMC-3, Fourth Floor
1315 East-West Highway
Silver Spring, MD 20910-3282

• All other orders:

NOAA's National Data Centers
Attn.: Fiscal Group
151 Patton Avenue
Asheville, NC 28801

CUSTOM DATA SETS ON CD-ROM

The NODC is also able to provide customers with data selected from its archive data files on recordable CD-ROMs. Because a CD-ROM can hold up to 650 megabytes of data, there is substantial cost savings when large data sets are provided on a single CD-ROM versus multiple tapes or diskettes.

NODC CD-ROM DATA SETS

• **World Ocean Database 1998 Data Sets.** The Ocean Climate Laboratory (OCL) of NOAA's National Oceanographic Data Center (NODC) has completed the first major phase of a project to update previous releases of global oceanographic data. *World Ocean Database 1998* (WOD98) expands on *World Ocean Atlas 1994* (WOA94) by including the additional variables nitrite, pH, alkalinity, chlorophyll, and plankton, as well as all available metadata and meteorology.

The WOD98 is comprised of five CD-ROMs containing the updated observed and standard profile and plankton/biomass data:

- Disc 1 - Observed Level Data North Atlantic 30°-90°N
- Disc 2 - Observed Level Data North Atlantic 0°-30°N and South Atlantic
- Disc 3 - Observed Level Data North Pacific 20°-90°N
- Disc 4 - Observed Level Data North Pacific 0°-20°N, South Pacific and Indian Oceans
- Disc 5 - Standard Level Data for all Ocean Basins

Included on each WOD98 CD-ROM are files containing data codes, documentation, programs and utilities. Updates, corrections, errata and Frequently Asked Questions are posted online:

<http://www.nodc.noaa.gov/OCL/oceancl.html>.

WOD98, 5 discs

• **World Ocean Atlas 1998.** All of the objectively analyzed fields and statistics, based on the World Ocean Database 1998, are available on CD-ROM or in publication form.

The World Ocean Atlas 1998 consists of 3 CD-ROMS containing :

- statistics of observed (vertically interpolated) unanalyzed data for 1° and 5° squares at standard depth levels. Statistics for each grid include number of observations, mean, standard deviation, and standard error of the mean.
- annual, seasonal and monthly objectively analyzed mean fields by 1° squares at standard depth levels
- “interpolation error” of the objectively analyzed fields (fields of observed means minus annual objectively analyzed mean by 1° squares at standard depth levels.)
- seasonal and monthly objectively analyzed fields minus annual mean objectively analyzed fields by 1° squares at standard depth levels
- land/ocean-bottom mask used in the analyses at standard depth levels
- definition of basins used in the objective analyses at standard depth levels
- Disc 1 - Temperature and Salinity

- Disc 2 - Oxygen
- Disc 3 - Nutrients and Chlorophyll

WOA98 - 3 discs (also available in publication form)

• **The World Ocean Atlas 1998 Figures.** The thousands of figures created to display the WOA98 analyses are available on 4 CD-ROM's. These discs contain the GIF images of objectively analyzed fields of temperature, salinity, dissolved oxygen, derived oxygen variables (Apparent Oxygen Utilization and oxygen saturation), nutrients (phosphate, nitrate and silicate) and chlorophyll, as well as figures of various statistics for these variables.

- Disc 1 - Temperature
- Disc 2 - Salinity
- Disc 3 - Oxygen
- Disc 4 - Nutrients and Chlorophyll

WOAF98 - 4 discs

• **World Ocean Circulation Experiment (WOCE) Global Data Version 1.0 1998.** The World Ocean Circulation Experiment of the World Climate Research Programme is dedicated to providing improvements in the ocean circulation models used in climate prediction. Resources and expertise from nearly 30 countries have been combined to produce unprecedented in-situ and satellite observations of the global oceans between 1990-1997. In accordance with the WOCE data sharing policy, this Global Data Version 1.0 CD-ROM series makes available a unique and incredibly diverse set of data, which will assist climate researchers and marine scientists in unraveling many important, but still poorly understood, physical processes.

This set of 13 discs consists of:

- Disc 1 - The Data Information Unit
- Disc 2 - Hydrographic Program, Data
- Disc 3 - Hydrographic Program, Data and Products
- Disc 4 - Upper Ocean Thermal
- Disc 5 - Subsurface Floats
- Disc 6 - Surface Velocity Program
- Disc 7 - Current Meter Moorings
- Disc 8 - Acoustic Doppler Current Profilers
- Disc 9 - Sea Level
- Disc 10 - Surface Meteorology, Pacific & Indian Oceans
- Disc 11 - Surface Meteorology, Atlantic & Southern Oceans
- Disc 12 - Surface Fluxes
- Disc 13 - Satellite Data

[Note: Some discs in this release, notably 3,4, 10 and 11, include encrypted data. Instructions on contacting the appropriate Principal Investigator to request data access are provided .] **13 discs.**

• **GEOSAT Altimeter Data: Enhanced JGM-3**

Geophysical Data Records. This set of 10 CD-ROMs contains improved geophysical data records (GDRs) from the U.S. Navy Geodetic Satellite (GEOSAT). The data span both the Geodetic Mission (GM, March 1985-September 1986) and the Exact Repeat Mission (ERM, November 1986- December 1989). The GM data were initially classified, but in 1995 were released by the Navy and distributed by NODC on CD-ROM. These GM GDRs were based on the original Naval Surface Weapons Center orbit. The ERM data have always been unclassified and were last issued on CD-ROM in 1991. These "T2" GDRs were based on orbits computed using the GEM-T2 gravity model.

For this 1997 release, a new satellite ephemeris has been computed by NASA's Goddard Space Flight Center using the JGM-3 gravity model. The JGM-3 orbits reduce the radial orbit error (nearly 1 meter during the GM and about 50 cm during the ERM) to the 10-15 cm level over the first 3.5 years of the mission. In addition, these new GDRs contain the following enhanced geophysical corrections that significantly increase the overall accuracy of the data: CSR 3.0 tides; model troposphere corrections from the NCEP/NCAR reanalysis; IRI95 ionosphere corrections; and a new sea state bias correction based on wind, wave, and satellite attitude.

The GDRs are stored in daily files in chronological order through the Geodetic and Exact Repeat Missions. The data are in the same 78-byte integer binary format as previous releases of the GEOSAT GDRs. Disc 1 (first disc holding the GM data) and Disc 5 (first disc holding the ERM data) contain documentation, tabular data, "high-precision" corrections, figures, and the CD-ROM Handbook, which can be viewed using standard Web browsers. More extensive documentation and analyses are available in the Online Handbook, which is a "living" document on the Web.

The data can be ordered in three ways: the complete set of 10 discs holding both the Geodetic and Exact Repeat Mission data; the four discs (nos. 1-4) holding only the Geodetic Mission data; or the six discs (nos. 5-10) holding only the Exact Repeat Mission data.

[Note: Foreign requesters must follow special procedures when ordering GEOSAT data. Please contact the NODC for further information.] **10 discs**

• **Gulf of Mexico Hydrographic and Marine Mammal Data.** This CD-ROM was produced in cooperation with the Texas A&M University (TAMU), Department of Oceanography. It includes hydrographic and marine mammal sighting data for the Gulf of Mexico. The marine mammal data is from the GulfCet Program sponsored by the U.S. Minerals Management Service and headquartered at the TAMU Galveston Campus.

The files on this CD-ROM are divided into two data groups: TAMU-GULFCET and TAMU-OCEANOGRAPHY. The TAMU-GULFCET hydrographic data were collected in 1992-1993 by researchers from the Texas Institute of Oceanography and TAMU-Galveston during the course of a field program to study the distribution and abundance of cetaceans (whales and dolphins) in the north-central and western Gulf of Mexico. The GULFCET\ MAMMALS files contain cetacean sighting data from eight seasonal aerial surveys, four spring ship surveys conducted by the NOAA National Marine Fisheries Service, and seven TAMU ship surveys.

The TAMU-OCEANOGRAPHY hydrographic data were collected over a broader area of the Gulf of Mexico during the period 1987-1995. The data have been drawn together from 46 cruises over the 9-year period and consist of CTD, XBT, and bottle data as well as some processed data parameters such as dynamic height and splined XBT data.

1 disc

• **NODC Taxonomic Code, Version 8.0.** The NODC Taxonomic Code is the largest, most flexible, and widely used of the various coding schemes developed to adapt the Linnean system of biological nomenclature to modern methods of data storage and retrieval. Version 8.0 contains approximately 244,000 records, about 38,000 more than version 7.0, which was released in 1993. This version of the NODC Taxonomic Code is designed to serve as a transition to a new system and includes both the older numerical codes (up to 12 digits) as well as new codes that are referred to as Taxonomic Serial Numbers (TSNs).

In the older system taxonomic information was built into the codes through the use of 2-digit couplets to represent one or more levels of the taxonomic hierarchy. Over the years the problems and shortcomings created by this approach have become more apparent. Therefore, no new codes are being added to this older system, and Version 8.0 presents the final state of the old code numbers. From now on, as new taxa are added they will be assigned only a TSN under the new system. The Taxonomic Serial Numbers remain with each taxon even if that taxon goes in or out of synonymy or is entirely reclassified. This new system allows the inclusion of multiple levels of taxonomy and greatly improves the overall management of the NODC Taxonomic Code. **1 disc**

• **NSWC Moored ADCP Data 1994-1995.** This database contains Acoustic Doppler Current Profiler (ADCP) data collected during 1994-1995 on the eastern shelf of Florida. The data were collected at 10-minute intervals by a bottom mounted 300-KHz ADCP unit (from RD Instruments, San Diego, Calif.) which was set offshore Fort Lauderdale, Florida at a depth of 140 meters. The

instrument is positioned at approximately 26° 04.0' N by 80° 03.5' W. This unit is supported by the United States Naval Surface Warfare Center (NSWC), which receives data directly from the ADCP by way of a submerged cable. Following negotiations in 1993, a cooperative effort was established between the National Oceanic and Atmospheric Administration (NOAA) and the NSWC to forward the ADCP data collected by NSWC to the NOAA Atlantic Oceanographic and Meteorological Laboratory (AOML) in Miami, Florida. Since April 1994, AOML has been receiving the data from NSWC.

This CD-ROM contains six subdirectories: BINARY, ASC, FLT, FLTDAILY, PLOTS, PGMS, and README. The BINARY subdirectory contains the original ADCP files as received from NSWC. The ASC subdirectory contains corresponding processed ADCP files in an ASCII format. The FLT subdirectory contains the ADCP data in a format processed to give north-south and east-west velocities at each bin depth. The PLOTS subdirectory contains the velocities found in the flat files projected as color Hovmueller plots in GIF format. The README subdirectory contains the documentation files, and the PGMS subdirectory contains sample FORTRAN programs that can be used to analyze the data. **1 disc**

- **Atlas of Surface Marine Data 1994.** This set of nine CD-ROMs contains raw and objectively analyzed fields of surface marine anomalies of fluxes of heat, momentum, and fresh water along with other parameters of interest. These revised monthly mean fields are derived from individual observations in the Comprehensive Ocean-Atmosphere Data Set (COADS Release 1 and an interim release for the 1980's) from January 1945 to December 1989, and are analyzed on a 1-degree by 1-degree global grid.

Corrections have been made to reduce wind speed bias associated with an erroneous Beaufort equivalent scale, to quality control night-time fractional cloud cover observations according to the brightness of the sky, to consider weather-associated "sky obscured" cloudiness observations as valid observations of 100% cloud cover, and to correct for erroneously missing "clear" present weather observations after 1981.

The data are in Unidata's NetCDF format. User friendly access subroutines in FORTRAN are included on the CD-ROMs for those unfamiliar with NetCDF.

This set of 9 discs contain the following data:

- Disc 1 - Directly observed quantities and number of observations
- Disc 2 - Heat, momentum, and fresh water fluxes
- Disc 3 - Miscellaneous derived quantities
- Disc 4 - Heat flux sensitivity to sea surface tempera-

tures

- Disc 5 - Anomalies of observed and surface flux quantities for 1990 - 1993
- Disc 6 - 0.5 x 0.5 degree analysis: Monthly Climatology Set
- Disc 7 - 0.5 x 0.5 degree analysis: Weekly Climatology Set - Part 1
- Disc 8 - 0.5 x 0.5 degree analysis: Weekly Climatology Set - Part 2
- Disc 9 - 0.5 x 0.5 degree analysis: Weekly Climatology Set - Part 3

9 discs

- **Ocean Current Drifter Data.** The CD-ROMs issued in this series hold the Surface Current (Ship Drift) Data Archive obtained by the NODC from the U.S. Naval Oceanographic Office and the World Ocean Circulation Experiment (WOCE) Subsurface Float Data released by the WOCE Subsurface Float Data Assembly Center located at the Woods Hole Oceanographic Institution.

Disc 1 of this set holds both the surface current (ship drift) data and the subsurface float data. The surface current (ship drift) data file contains over 4 million surface current observations, almost all of which were collected by the ship drift method. Date, data source, position, and current direction and speed are recorded for each observation. The subsurface float data set consists primarily of SOFAR (Sound Fixing and Ranging) and RAFOS (SOFAR spelled backwards) float trajectories. These floats are ballasted for a target depth and acoustically tracked. Some recently released ALACE (Autonomous Lagrangian Circulation Explorer) float trajectories are also included with this float data set. ALACE is a subsurface float that cycles vertically from a depth where it is neutrally buoyant to the surface where it is located by, and relays data to, System Argos satellites. The subsurface float data has approximately 475 float trajectories and 432 float-years of data, mostly from the North Atlantic Ocean.

Disc 2 holds surface current data summaries in the NODC Surface Current (Ship Drift) Long Summary format. The data are summarized by ten-degree square, one-degree square, and month for all years. For specified one-degree squares and months, the summaries provide:

- total number of observations,
- number of calms,
- resultant current direction and speed,
- north and east current components, and
- a statistical distribution and analysis of observations by 15 speed classes and eight compass directions. **2 discs**

- **Sea Level Data.** The data on this CD-ROM are provided in two main directories. One directory contains Tropi-

cal Ocean-Global Atmosphere (TOGA) project sea level data, file formats, and associated documentation. The other main directory contains the Permanent Service for Mean Sea Level (PSMSL) data, documentation, and a few related data sets.

The TOGA sea level data is managed by the TOGA Sea Level Center at the University of Hawaii in cooperation with the NODC through the Joint Archive for Sea Level. This archive holds hourly, daily, and monthly sea level values in standard formats from 289 sea level stations in the Pacific, Atlantic, and Indian Oceans. These data are collected in support of the TOGA project and are primarily in the tropical ocean areas of TOGA interest (30 N - 30 S). This CD-ROM contains the TOGA sea level holdings as of July 1994, as well as quality assessments and an inventory list of all stations that includes geographic positions and data time spans.

The Permanent Service for Mean Sea Level is based at the Proudman Oceanographic Laboratory, Bidston Observatory, United Kingdom, and the PSMSL data set contains monthly and annual mean values of sea level from approximately 1500 tide gauge stations around the world. Other related data sets are also included such as the IAPSO (International Association for the Physical Sciences of the Ocean) Tidal constants data set and the Revised Local Reference annual mean values. This CD-ROM holds the PSMSL data holdings as of August 1994. *1 disc*

• **Coastal Change Analysis Project Data.** The Coastal Change Analysis Project (C-CAP) is designed to monitor change in terrestrial land cover and near shore benthic resources within coastal environments of the U.S., including the Atlantic, Pacific, Gulf of Mexico, Great Lakes, Alaska, Hawaii and all U.S. territories and possessions. C-CAP classifies types of land cover submerged habitats, wetland habitats, and adjacent uplands using remote sensing techniques (satellite imagery and aerial photography). The Chesapeake Bay Land Classification Data Set represents the prototype effort of the C-CAP project and is based on an analysis of Landsat Thematic Mapper (TM) scenes of the Chesapeake Bay region. This data set constitutes one of the largest change detection efforts ever attempted, covering approximately 30,000 square miles. A total of four Landsat scenes for each period were required to completely cover the Bay area. This CD-ROM data product consists of three data sets:

1. Analysis of four Landsat Thematic Mapper scenes from 1984.
2. Analysis of four Landsat Thematic Mapper scenes from 1988-89 for the same area, and
3. Analysis of the resulting change between 1984 and 1988-89.

The land cover analyses distinguish 14 land cover classes,. And the change analysis resulted in 81 classes.

The St. Croix Estuary was the second release in this series of CD-ROM data sets. Historically valuable as a habitat for salmon, this area is now threatened by changes from the large Maine and Canadian forestry industries. Understanding where and how these changes are occurring is important for sound resource management decisions. This area required only one Landsat TM scene per period. The data sets on this CD-ROM are:

1. Analysis of a single Landsat Thematic Mapper scene from 1985.
2. Analysis of a single Landsat Thematic Mapper scene from 1992 for the same area, and
3. Analysis of the resulting change between 1985 and 1992.

Fifteen land cover classifications and 225 change analysis classes were defined by the land cover analysis for this region.

The data are in a binary unblocked format. A record consists of one row of pixels, and the first data value is in the upper left-hand corner of the image. The CD-ROM includes GeoVu display software developed by the National Geophysical Data Center.

Although the mass-produced CD-ROMs are out of stock, the data are still available as "one-off" recordable CD-ROMs. If desired, the Chesapeake Bay and St. Croix Estuary data sets will fit on a single CD-ROM. *1 disc*

• **GEOSAT Global Wind/Wave Data.** This CDROM holds global wind/wave data derived from altimeter data collected during the Geodetic Mission of the U.S. Navy Geodetic Satellite (GEOSAT). The data span the period from March 31, 1985 through September 30, 1986. The Navy released the radar backscatter (from which wind speed is derived) and the significant wave height data. This disc holds these data and includes two wind speed fields that were computed using different algorithms. The README file on this disc also provides three additional wind speed algorithms proposed since 1988 and a bibliography that includes references to papers that discuss the algorithm used to compute significant wave height. The wind/wave data are recorded as 26-byte binary records. [Note: *Foreign requesters must follow special procedures when ordering GEOSAT data. Please contact the NODC for further information.*] *1 disc*

• **NOAA Marine Environmental Buoy Database.**

These CD-ROMs holds marine meteorological, oceanographic, and wave spectra data collected by moored buoys and C-MAN (Coastal-Marine Automated Network) stations operated by the NOAA National Data Buoy Center

(NDBC). C-MAN stations are located at coastal and near-shore sites on piers, offshore towers, lighthouses, and beaches. The NDBC buoys began reporting in the early 1970's and the NODC archive holds data from February 1970. The first C-MAN stations became operational in March 1983, and the NODC archive of C-MAN data begins in 1985.

Principal measured parameters reported by both moored buoys and C-MAN stations include air temperature and pressure, wind speed and direction, wind gust, and sea surface temperature. The buoys (and a few C-MAN stations located on offshore platforms) also report wave data, which usually include wave height, wave period, and wave spectra. Since the late 1980's, some buoys have reported directional wave spectra. Data files for each buoy or C-MAN station are arranged chronologically in directories by their station identifier. Each file contains data for one month for that buoy or station.

The recent release of interactive CD-ROM's contains all of the NOAA National Data Buoy Center buoy data archived at the NODC through December of 1997. These data are compressed, flat ASCII files, stored in monthly segments in the NODC F291 file format. The CD-ROM's are html compatible and, with an Internet browser, options exist for locating and viewing the data, and for gathering information on buoy locations, period of record, data availability, etc. Hyperlinks are also included for obtaining archived data stored since December 1997, and for real-time data access at the National Buoy Data Center. Access is not limited to use with an Internet browser, however. Files may be easily located on the CD-ROM and downloaded directly to a PC or unix system. Detailed instructions and decompression software are included on each CD-ROM to support this option.

Data on the CD-ROMs are separated by ocean areas as follows:

Disc 1: Upper North Atlantic

Disc 2: Mid- and lower North Atlantic

Disc 3: Gulf of Mexico

Disc 4: Great Lakes

Disc 5: Lower Eastern and U.S. Pacific Coast

Disc 6: Upper Eastern Pacific

Disc 7: Alaska, Hawaii and other Pacific buoys

Buoy Webdiscs - 7 discs

• **Oceanographic Station Profile Time Series.** The National Oceanographic Data Center and the World Data Center A for Oceanography have compiled from the NODC Oceanographic Station Data File a set of oceanographic data having repetitive samples along ocean sections or at fixed stations for long time periods. These oceanographic station time-series include temperature, salinity,

density, and nutrient data. The total time-series data set contains: 27 North Pacific sections; 56 North Atlantic sections; sections along coastal California from the California Cooperative Fisheries Investigations (CALCOFI); 19 sections from other ocean regions; and data from the 10 Ocean Weather Stations.

The CD-ROM contains both data and inventory files. Each inventory file is sorted by NODC Reference Number. The data on this disc are stored as ASCII records in the NODC Oceanographic Station Data 2 (SD2) format. Also included on the CD-ROM is a conversion program that enables these data to be used with the ATLAST software. [*ATLAST is a software package for accessing and displaying hydrographic and tracer section data. Developed by Dr. Peter Rhines of the University of Washington, it is distributed by the Jet Propulsion Laboratory.*] **1 disc**

• **GEOSAT Altimeter Crossover Differences from the Geodetic Mission.** The first 18 months of GEOSAT operations (April 1985 to September 1986) were referred to as the Geodetic Mission. The altimeter crossover differences from the Geodetic Mission are contained on this set of eight CD-ROMs in the form of crossover difference records (XDRs). XDRs were constructed for the first 2.5 years of the GEOSAT mission, that is, data from the Geodetic Mission plus the first year of the Exact Repeat Mission. This was done to minimize the effect of the 5-week data gap (October 1 to November 8, 1986) between the two missions. The data are in a binary Hewlett-Packard format, but each disc contains a module that enables the data to be converted to binary VAX format. The GEOSAT altimeter crossover difference records are documented in a NOAA handbook, a copy of which is provided with each order. [*Note: Foreign requestors must follow special procedures when ordering GEOSAT data. Please contact the NODC for further information.*] **8 discs**

• **Global Ocean Temperature and Salinity Profiles.** This set of two CD-ROMs contains global ocean temperature and salinity profiles derived from six major NODC archive files: (1) Oceanographic Station Data, (2) CTD/STD Data, (3) Expendable Bathythermograph Data, (4) Mechanical Bathythermograph Data, (5) Radio Message Bathythermograph Data, and (6) Selected Level Bathythermograph Data. The data span the period from 1900 to 1990. Disc 1 contains 1.62 million profiles from the Atlantic and Indian Oceans; Disc 2 contains 1.57 million profiles from the Pacific Ocean. The data are in ASCII format. Data access and display software is provided on two floppy diskettes. **2 discs**

• **Louisiana-Texas Shelf Physical Oceanography Program (LATEX-A).** LATEX-A data were collected from the Mississippi River to the Rio Grand between April 1992 and December 1994 to build a baseline for understanding the Gulf of Mexico shelf circulation and transport processes. During this field phase, instruments recording horizontal ocean current, temperature and conductivity were maintained on an array of 33 moorings. The LATEX mooring instrumentation consisted of 81 current meters measuring current speed and direction, temperature and conductivity; five direction wave gauges measuring current speed and direction, temperature and pressure; and one inverted echo sounder measuring acoustic travel time and bottom temperature and pressure. Eight moored meteorological buoys measured wind speed and direction, air and

sea surface temperature and barometric pressure. Sixteen free-drifting buoys provided information on their locations and sea surface temperature via satellite. Ten hydrographic/ADCP surveys were conducted, with continuous ADCP measurements taken along the cruise track. At each hydrographic sampling station, continuous profiles were made of conductivity, temperature, dissolved oxygen, downwelling irradiance, particle scattering, fluorescence, and beam attenuation. Up to 12 water samples were analyzed for dissolved oxygen salinity, phytoplankton, silicate, urea and ammonium. Water samples were analyzed for dissolved oxygen, salinity, phytoplankton pigments, and surface and bottom particulate matter concentrations. Secchi disk depths were taken at each daylight station. *5 discs*

U.S. academic institutions, government agencies, and other nonprofit organizations are entitled to receive a discount (of approximately 25%) off regular prices for their data orders. This price list gives both the regular and discount prices for NODC CD-ROM products.

	Standard/Discount	
Atlas of Surface Marine Data 1994:		
Individual Disks	\$100	\$75
Complete set (9 discs)	\$900	\$675
Coastal Change Analysis Project (C-CAP):		
Chesapeake Bay Region (1 disc)	\$120	\$90
St. Croix Estuary (1 disc)	\$120	\$90
Chesapeake Bay & St. Croix Estuary (1 disc)	\$120	\$90
Geosat Altimeter Data: Enhanced JGM-3 Geophysical Data Records		
Data from the Geodetic Mission (1985-86, 4 discs)	\$200	\$144
Data from the Exact Repeat Mission (1986-89, 6 discs)	\$300	\$216
Complete set (10 discs)	\$500	\$360
Geosat Altimeter Crossover Differences		
Individual discs	\$30	\$22
Complete set (8 discs)	\$235	\$176
Geosat Global Wind/Wave Data (1 disc)	\$175	\$130
Global Ocean Temperature-Salinity Profiles		
Disc 1 - Atlantic and Indian Oceans	\$175	\$130
Disc 2 - Pacific Ocean	\$175	\$130
Complete set (2 discs)	\$350	\$260
Gulf of Mexico Hydrographic and Marine Mammal Data (1 disc)	\$100	\$75
Louisiana-Texas Shelf Physical Oceanography Program (LATEX-A):		
Individual discs	\$75	\$55
Complete set (5 discs)	\$500	\$375
NODC Taxonomic Code, Version 8.0 (1 disc)	\$100	\$75
NOAA Marine Environmental Buoy Webdiscs		
Individual discs	\$75	\$55
Complete set (7 discs)	\$525	\$385
NSWC Moored ADCP Data 1994-1995 (1 disc)	\$100	\$75
Oceanographic Station Profile Time Series (1 disc)	\$175	\$130
Ocean Current Drifter Data:		
Disc 1 - Surface current (ship drift) data/subsurface float data	\$100	\$75
Disc 2 - Surface current (ship drift) data summaries	\$100	\$75
Complete set (2 discs)	\$200	\$150
Sea Level Data (1 disc)	\$100	\$75
World Ocean Atlas 1998 Analyzed Fields & Statistics		
Individual discs	\$75	\$55
Complete set (3 discs)	\$225	\$165
World Ocean Atlas 1998 Figures		
Individual discs	\$75	\$55
Complete set (4 discs)	\$300	\$220

World Ocean Circulation Experiment (WOCE) Global Data Version 1.0:

Individual discs	\$55	\$42
Complete set (13 discs)	\$715	\$546

World Ocean Database 1998 Data Sets:

Individual discs	\$75	\$55
Complete set (10 discs)	\$375	\$275

Handling /Shipping Charges: To determine total charge per order, determine subtotal of items ordered and add:

- Service and handling - Orders *less than \$50*, add \$5; orders *greater than or equal to \$50*, add \$11.
- Foreign shipping/handling surcharge: For orders shipped to non-U.S. address, add \$10 if subtotal is less than \$100. If over \$100, please add \$20.
- Overnight rush surcharge: For overnight shipment by express package service, add \$100 (\$75 for U.S. academic institutions, government agencies, and other nonprofit organizations).

Payment Procedures: Payment for NODC data products may be made by:

- Check or money order (in U.S. dollars drawn on a bank in the United States and made payable to: "NOAA National Data Centers-NODC". Checks must also contain your bank's 9-digit ABA (American Banking Association) routing and transit number.) **Mail checks to:** NOAA National Data Centers
Attn.: Fiscal Group
151 Patton Avenue
Asheville, NC 28801
- Credit card (Visa, MasterCard, American Express or Discover)
- Foreign wires should be sent directly to First Chicago NBD, routing transit code 0710-00013, with credit to DDA #11-71542 (NOAA National Data Centers). *You must add an additional \$15 to your order to cover the bank's service charge.*

Orders and inquiries should be directed to:

National Oceanographic Data Center
User Services Inter-divisional Team
NOAA/NESDIS E/OC1, SSMC3, 4th Floor
1315 East-West Highway
Silver Spring, MD 20910-3282

TELEPHONE: 301-713-3277 # FAX: 301-713-3302 # E-MAIL: services@nodc.noaa.gov

Order online and save at the *NOAA National Data Centers Online Store* on the NODC World Wide Web site at <http://www.nodc.noaa.gov/>

ORDER FORM

Data Product Selection

ITEM	Unit Price	Quan.	Total
SUBTOTAL			
Service and handling: Order less than \$50, add \$5; order greater than or equal to \$50, add \$11:			
Foreign shipping and handling surcharge: For shipments to non-U.S. address, add \$10 if subtotal is less than \$100, or \$20 if \$100 or more:			
Overnight rush surcharge: For overnight delivery by express package service, add \$100 (\$75 for U.S. academic institutions, government agencies, and other non-profit organizations):			
TOTAL PAYMENT (<i>thank you!</i>)			

Customer Identification/Shipping Information

FROM:

Name _____
Title/Department _____
Organization _____
Street Address _____
City _____ State _____ Zip _____
Country _____
Telephone No. (with area code) _____

SHIP TO:

Name _____
Title/Department _____
Organization _____
Street Address _____
City _____ State _____ Zip _____
Country _____
Telephone No. (with area code) _____

Payment Amount and Method

Total payment due (from page 3):

DEPARTMENT OF COMMERCE REGULATIONS REQUIRE PREPAYMENT FOR ALL NON-FEDERAL ORDERS. Checks and money orders must be in U.S. dollars drawn on a U.S.A. bank, made payable to "NOAA National Data Centers", and contain your banks' 9-digit ABA (American Banking Association) routing and transit number. *Do not send cash.* Orders may be charged to a credit card (Visa, MasterCard or American Express) by mail, telephone, fax or e-mail. Please include credit card account number, expiration date, authorized signature, and telephone number with order.

.....

G Enclosed check or money order payable to "NOAA National Data Centers"
(All foreign orders must be in U.S. dollars, drawn on a U.S. bank)

Mail this form with check or money order to: NOAA National Data Centers
Attn: Fiscal Group
151 Patton Avenue
Asheville, NC 28801

.....

| Please charge to my: **G Visa** **G MasterCard** **G American Express** **G Discover**

Account No. _____ Expiration Date _____

Authorized charge card signature _____

Please print name _____

Place credit card orders (only) by mail, phone, fax or e-mail:

National Oceanographic Data Center
NOAA/NESDIS/User Services Team
SSMC-3, 4th floor
1315 East-West Highway
Silver Spring, MD 20910-3282

Telephone: 301-713-3277
Fax: 301-713-3302
E-mail: services@nodc.noaa.gov

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